

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	2	"20040057214"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/17 17:31
S2	1	@ad<="20020716" and 'multichip modules' and 'IC' and 'PCB' and 'vapor chamber'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/06/23 16:10
S3	1	"6429513".PN.	USPAT; USOCR	OR	ON	2004/11/17 17:32
S4	2	@ad<="20020716" and 'multichip modules' and 'IC' and 'vapor chamber'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/19 10:43
S5	14	@ad<="20020716" and 'multichip modules' and 'IC' and 'lid' and 'dissipating'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/17 17:41
S6	5	@ad<="20020716" and 'multichip modules' and 'IC' and 'hollow' same 'heat'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/17 17:41
S7	31	@ad<="20020716" and 'multichip modules' and 'hollow' same 'heat'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/17 17:44
S8	1	"6429513".PN.	USPAT; USOCR	OR	ON	2004/11/17 17:48
S9	1	"6212074".PN.	USPAT; USOCR	OR	ON	2004/11/17 17:48
S10	1	"6166908".PN.	USPAT; USOCR	OR	ON	2004/11/17 17:49
S11	1	"6091603".PN.	USPAT; USOCR	OR	ON	2004/11/17 17:50
S12	81	@ad<="20020716" and 'heat sink' same 'vapor chamber'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/17 17:50
S13	1	"6429513".PN.	USPAT; USOCR	OR	ON	2004/11/18 07:40
S14	1	"5880524".PN.	USPAT; USOCR	OR	ON	2004/11/18 07:40

## EAST Search History

S15	1	"5915463".PN.	USPAT; USOCR	OR	ON	2004/11/18 07:40
S16	6	@ad<="20020716" and 'MCM' and 'vapor chamber' and 'heat sink'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/19 10:56
S17	81	@ad<="20020716" and 'vapor chamber' same 'heat sink'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/18 10:24
S18	1	"6237223".PN.	USPAT; USOCR	OR	ON	2004/11/18 08:11
S19	1	"6062302".PN.	USPAT; USOCR	OR	ON	2004/11/18 08:12
S20	1	"5864466".PN.	USPAT; USOCR	OR	ON	2004/11/18 08:12
S21	1	"5704416".PN.	USPAT; USOCR	OR	ON	2004/11/18 08:12
S22	1	"5647430".PN.	USPAT; USOCR	OR	ON	2004/11/18 08:13
S23	1	"6269865".PN.	USPAT; USOCR	OR	ON	2004/11/18 08:14
S24	1	"6269865".PN.	USPAT; USOCR	OR	ON	2004/11/18 08:14
S25	1	"6164368".PN.	USPAT; USOCR	OR	ON	2004/11/18 08:14
S26	1339	@ad<="20020716" and (438/122-123).ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/18 09:00
S27	647	@ad<="20020716" and (438/125).ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/18 09:01
S28	115	@ad<="20020716" and (438/55).ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/18 09:01
S29	1496	@ad<="20020716" and (257/706-707).ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/18 09:01

## EAST Search History

S30	1483	@ad<="20020716" and (257/704-705).ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/14 16:40
S31	719	@ad<="20020716" and (257/675).ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/18 09:02
S32	874	@ad<="20020716" and (257/717).ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/18 10:12
S33	1041	@ad<="20020716" and (257/721-722).ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/18 09:02
S34	1922	@ad<="20020716" and (361/704).ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/18 09:02
S35	556	@ad<="20020716" and (361/709).ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/18 09:03
S36	130	@ad<="20020716" and (361/711).ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/18 09:03
S37	336	@ad<="20020716" and (361/717).ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/18 09:03
S38	929	@ad<="20020716" and (361/719).ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/18 09:04
S39	797	@ad<="20020716" and (361/690-691).ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/18 09:04
S40	1055	@ad<="20020716" and (165/104.33).ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/18 09:04

## EAST Search History

S41	848	@ad<="20020716" and (165/104.21).ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/18 09:04
S42	1	"5751062".PN.	USPAT; USOCR	OR	ON	2004/11/18 09:35
S43	1	"5930115".PN.	USPAT; USOCR	OR	ON	2004/11/18 10:06
S44	1	"5880930".PN.	USPAT; USOCR	OR	ON	2004/11/18 10:06
S45	1	"5625227".PN.	USPAT; USOCR	OR	ON	2004/11/18 10:06
S46	1	"5345107".PN.	USPAT; USOCR	OR	ON	2004/11/18 10:06
S47	1	"4612978".PN.	USPAT; USOCR	OR	ON	2004/11/18 10:09
S48	1	"5179500".PN.	USPAT; USOCR	OR	ON	2004/11/18 10:09
S49	1	"5325265".PN.	USPAT; USOCR	OR	ON	2004/11/18 10:09
S50	1	"5704416".PN.	USPAT; USOCR	OR	ON	2004/11/18 10:09
S51	1	"5880524".PN.	USPAT; USOCR	OR	ON	2004/11/18 10:10
S52	1	"5915463".PN.	USPAT; USOCR	OR	ON	2004/11/18 10:10
S53	1	"6085831".PN.	USPAT; USOCR	OR	ON	2004/11/18 10:10
S54	1	"6091603".PN.	USPAT; USOCR	OR	ON	2004/11/18 10:10
S55	1	"5880524".PN.	USPAT; USOCR	OR	ON	2004/11/18 10:11
S56	33	@ad<="20020716" and (257/717).ccls. and 'chamber'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/14 16:42
S57	43	@ad<="20020716" and (257/717).ccls. and 'pipe'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/18 10:13
S58	67	@ad<="20020716" and 'chamber' same 'heat spreader'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/18 10:24

## EAST Search History

S59	206	@ad<="20020716" and 'pipe' same 'heat spreader'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/18 10:25
S60	9	@ad<="20020716" and 'heatpipe' same 'heat spreader'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/18 10:25
S61	190	@ad<="20020716" and 'heat pipe' same 'heat spreader'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/19 10:52
S62	1	"5325265".PN.	USPAT; USOCR	OR	ON	2004/11/19 09:36
S63	1	"5704416".PN.	USPAT; USOCR	OR	ON	2004/11/19 09:36
S64	0	@ad<="20020716" and 'multichip modules' and 'IC' and 'stiffener' with 'poldermer'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/19 10:47
S65	42	@ad<="20020716" and 'PGA' same 'substrate' with 'polymer'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/19 10:47
S66	6	@ad<="20020716" and 'multichip modules' and 'IC' and 'stiffener' with 'polymer'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/19 10:47
S67	0	@ad<="20020716" and 'heat pipe' same 'heat spreader' and 'substrate' with 'polymer'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/19 10:52
S68	50	@ad<="20020716" and 'heat pipe' and 'substrate' with 'polymer'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/19 10:53
S69	112	@ad<="20020716" and 'MCM' and 'heat sink' and 'substrate' with 'polymer'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/19 11:06
S70	3	@ad<="20020716" and 'MCM' same 'heat sink' same 'substrate' with 'polymer'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/19 10:56

## EAST Search History

S71	0	@ad<="20020716" and 'MCM' and 'package substrate' with 'polymer' with 'ceramic'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/19 11:06
S72	6	@ad<="20020716" and 'MCM' and 'package substrate' with 'polymer'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/15 09:48
S73	3	@ad<="20020716" and 'package substrate' with 'polymer' with 'ceramic'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/14 16:09
S74	6	Alcoe-David.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/14 15:31
S75	33	'Alcoe David J'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/06/23 16:00
S76	22	'Alcoe David J' and 'CTE'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/14 15:32
S77	1	"6429513".PN.	USPAT; USOCR	OR	ON	2005/03/14 15:35
S78	419	@ad<="20020716" and 'package' and 'chamber' and ('coefficient of thermal expansion' or 'CTE')	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/14 16:10
S79	5	@ad<="20020716" and 'package' and 'vapor chamber' and ('coefficient of thermal expansion' or 'CTE')	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/14 17:17
S80	15	@ad<="20020716" and 'vapor chamber' and ('coefficient of thermal expansion' or 'CTE')	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/14 17:18
S81	7	@ad<="20020716" and 'lidded package' and ('coefficient of thermal expansion' or 'CTE')	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/14 17:19

## EAST Search History

S82	32	@ad<="20020716" and ('multichip modules' or 'MCM') and 'substrate' with 'ceramic' with 'fiberglass'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/15 07:19
S83	3	@ad<="20020716" and ('multichip modules' or 'MCM') and 'heat sink' and 'substrate' with 'ceramic' with 'fiberglass'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/15 07:19
S84	1	"6392890".PN.	USPAT; USOCR	OR	ON	2005/03/15 07:32
S85	1	"6292369".PN.	USPAT; USOCR	OR	ON	2005/03/15 07:32
S86	1	"5387815".PN.	USPAT; USOCR	OR	ON	2005/03/15 07:32
S87	1	"6288900".PN.	USPAT; USOCR	OR	ON	2005/03/15 07:37
S88	1	"6264882".PN.	USPAT; USOCR	OR	ON	2005/03/15 07:38
S89	1	"4425195".PN.	USPAT; USOCR	OR	ON	2005/03/15 07:38
S90	1	"6114048".PN.	USPAT; USOCR	OR	ON	2005/03/15 07:38
S91	1	"6097602".PN.	USPAT; USOCR	OR	ON	2005/03/15 07:39
S92	1	"5945217".PN.	USPAT; USOCR	OR	ON	2005/03/15 07:39
S93	14	@ad<="20020716" and 'MCM' and 'package substrate' same 'lid'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/15 09:48
S94	172	@ad<="20020716" and 'package substrate' same 'lid'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/03/15 09:48
S95	7	'hong xie'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/06/23 16:03
S97	142	'xie' and 'intel'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/06/23 16:04

## EAST Search History

S98	16	@ad<="20020716" and 'Heat pipe lid'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/06/23 16:17
S99	1	"5751062".PN.	USPAT; USOCR	OR	ON	2005/06/23 16:10
S10 0	1	"5625227".PN.	USPAT; USOCR	OR	ON	2005/06/23 16:11
S10 1	1	"5365400".PN.	USPAT; USOCR	OR	ON	2005/06/23 16:11
S10 2	1	"5349237".PN.	USPAT; USOCR	OR	ON	2005/06/23 16:11
S10 3	1	"5345107".PN.	USPAT; USOCR	OR	ON	2005/06/23 16:11
S10 4	1	"5329993".PN.	USPAT; USOCR	OR	ON	2005/06/23 16:12
S10 5	1	"5283715".PN.	USPAT; USOCR	OR	ON	2005/06/23 16:12
S10 6	1	"20030128521".PN.	US-PGPUB	OR	ON	2005/06/23 16:12
S10 7	1	"20020132896".PN.	US-PGPUB	OR	ON	2005/06/23 16:13
S10 8	1	"5403783".PN.	USPAT; USOCR	OR	ON	2005/06/23 16:13
S10 9	1	"5355942".PN.	USPAT; USOCR	OR	ON	2005/06/23 16:14
S11 0	1	"5323292".PN.	USPAT; USOCR	OR	ON	2005/06/23 16:14
S11 1	1	"4880052".PN.	USPAT; USOCR	OR	ON	2005/06/23 16:15
S11 5	3	@ad<="20020716" and 'Heat pipe' and 'sub-chamber' and 'heat sink'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/06/23 16:20
S11 6	6	@ad<="20020716" and 'Heat pipe' and 'sub-chamber'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/06/23 16:21
S11 8	260	@ad<="20020716" and 'Heat pipe' same 'support' and 'heat sink'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/16 13:15
S11 9	0	@ad<="20020716" and 'Heat pipe' same 'chamber' and 'wiring board' with 'ceramic'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/06/27 12:07



## EAST Search History

S12 0	12	@ad<="20020716" and 'Heat pipe' same 'chamber' and 'board' with 'ceramic'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/06/27 12:41
S12 1	168	@ad<="20020716" and 'PCB' with 'ceramic' and 'heat sink'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/06/27 12:42
S12 2	0	@ad<="20020716" and 'PCB' with 'ceramic' with 'polymer' and 'heat sink'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/10/13 12:28
S12 3	39	@ad<="20020716" and 'PCB' with 'ceramic' same 'heat sink'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/06/27 12:44
S12 4	3	@ad<="20020716" and 'vapor chamber' and 'PCB' with 'ceramic' and 'heat sink'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/06/27 12:52
S12 5	176	@ad<="20020716" and 'vapor chamber' and 'heat pipe'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/10/13 09:02
S12 6	8	@ad<="20020716" and 'Heat pipe' same 'lid' with 'support'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/10/13 08:24
S12 7	2	@ad<="20020716" and 'Heat pipe lid' same 'support'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 13:56
S12 8	174	@ad<="20020716" and 'vapor chamber' same 'support'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/10/13 08:26
S12 9	1	"6469893".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:31
S13 0	1	"6381135".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:31
S13 1	1	"6347036".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:31
S13 2	1	"6031716".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:31

## EAST Search History

S13 3	1	"5549155".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:31
S13 4	1	"5751062".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:37
S13 5	1	"5585671".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:38
S13 6	1	"5345107".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:39
S13 7	1	"5276289".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:45
S13 8	1	"4649990".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:46
S13 9	1	"5751062".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:47
S14 0	1	"5625227".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:47
S14 1	1	"5625227".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:49
S14 2	1	"5455458".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:49
S14 3	1	"5448108".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:49
S14 4	1	"5373417".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:49
S14 5	1	"5305184".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:49
S14 6	1	"5270572".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:49
S14 7	1	"5625227".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:52
S14 8	1	"5365400".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:52
S14 9	1	"5349237".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:53
S15 0	1	"5345107".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:53
S15 1	1	"5329993".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:54
S15 2	1	"5291064".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:54
S15 3	1	"5291064".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:54
S15 4	1	"5283715".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:54
S15 5	1	"5268812".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:55
S15 6	1	"5253702".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:55

## EAST Search History

S15 7	1	"5239200".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:55
S15 8	1	"5198889".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:56
S15 9	1	"5077601".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:57
S16 0	1	"5046552".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:58
S16 1	1	"5023695".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:58
S16 2	1	"5019880".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:58
S16 3	1	"4996589".PN.	USPAT; USOCR	OR	ON	2005/10/13 08:59
S16 4	1	"4966226".PN.	USPAT; USOCR	OR	ON	2005/10/13 09:00
S16 5	1	"4996589".PN.	USPAT; USOCR	OR	ON	2005/10/13 09:00
S16 6	1	"4982274".PN.	USPAT; USOCR	OR	ON	2005/10/13 09:00
S16 7	1	"4931905".PN.	USPAT; USOCR	OR	ON	2005/10/13 09:01
S16 8	445	@ad<="20020716" and ('heatpipe' or 'heat pipe') and 'bellow'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/10/13 09:03
S16 9	214	@ad<="20020716" and ('heatpipe' or 'heat pipe') same 'bellow'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/10/13 09:04
S17 0	171	@ad<="20020716" and ('heatpipe' or 'heat pipe') with 'bellow'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/10/13 09:04
S17 1	65	@ad<="20020716" and 'PCB' with ( 'polytetrafluoroethylene' or 'PTFE')	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/10/13 12:47
S17 3	435	@ad<="20020716" and 'substrate' with ('polytetrafluoroethylene' or 'PTFE') with 'ceramic'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/10/13 12:48
S17 4	156	@ad<="20020716" and 'substrate' with 'polymer' with ( 'polytetrafluoroethylene' or 'PTFE') with 'ceramic'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/10/13 12:49

## EAST Search History

S17 5	13	@ad<="20020716" and 'substrate' with 'polymer' with ('polytetrafluoroethylene' or 'PTFE') with 'ceramic' and 'packaging'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/10/13 12:49
S17 6	10	@ad<="20020716" and 'substrate' with 'polymer' with ('polytetrafluoroethylene' or 'PTFE') with 'ceramic' and 'packaging' and 'chip'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/10/13 12:53
S17 7	102	@ad<="20020716" and ('polytetrafluoroethylene' or 'PTFE') with 'substrate' same 'chip'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/10/13 13:15
S17 8	170	@ad<="20020716" and 'CTE' with ('polytetrafluoroethylene' or 'PTFE')	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/10/13 13:16
S17 9	7	@ad<="20020716" and 'CTE' with 'polytetrafluoroethylene'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/10/13 13:18
S18 0	1019	@ad<="20020716" and 'CTE' with 'silicon'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/10/13 13:18
S18 1	518	@ad<="20020716" and 'CTE' with 'copper'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/10/13 13:18
S18 2	80	@ad<="20020716" and 'Heat pipe' same 'support' and 'heat sink' and 'chamber'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/16 13:56
S18 3	29	@ad<="20020716" and 'Heat pipe' same 'support' and 'VAPOR chamber'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/16 14:00
S18 4	179	@ad<="20020716" and 'Heat pipe' and 'vapor chamber'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/16 14:01
S18 5	265	@ad<="20020716" and 'Heat pipe' same 'support' and 'chamber'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/16 14:00

## EAST Search History

S18 6	113	@ad<="20020716" and 'Heat pipe' and 'vapor chamber' and 'heat sink'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/16 14:28
S18 7	291	@ad<="20020716" and 'Heat pipe' with 'chamber' and 'heat sink'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/16 14:38
S18 8	19	@ad<="20020716" and 'Heat pipe chamber' and 'heat sink'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/16 14:32
S18 9	48	@ad<="20020716" and 'Heat pipe chamber'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/16 14:32
S19 0	309	@ad<="20020716" and 'Heat pipe' and 'intel'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/16 14:38
S19 1	1	"5880524".PN.	USPAT; USOCR	OR	ON	2005/12/16 14:43
S19 2	1	"5751062".PN.	USPAT; USOCR	OR	ON	2005/12/16 14:43
S19 3	1	"5625227".PN.	USPAT; USOCR	OR	ON	2005/12/16 14:43
S19 4	1	"5365400".PN.	USPAT; USOCR	OR	ON	2005/12/16 14:43
S19 5	1	"5349237".PN.	USPAT; USOCR	OR	ON	2005/12/16 14:44
S19 6	1	"5345107".PN.	USPAT; USOCR	OR	ON	2005/12/16 14:44
S19 7	1	"5329993".PN.	USPAT; USOCR	OR	ON	2005/12/16 14:44
S19 8	1	"5291064".PN.	USPAT; USOCR	OR	ON	2005/12/16 14:44
S19 9	1	"5283715".PN.	USPAT; USOCR	OR	ON	2005/12/16 14:45
S20 0	1	"5268812".PN.	USPAT; USOCR	OR	ON	2005/12/16 14:45
S20 1	1	"5253702".PN.	USPAT; USOCR	OR	ON	2005/12/16 14:45
S20 2	1	"5239200".PN.	USPAT; USOCR	OR	ON	2005/12/16 14:45
S20 3	1	"5198889".PN.	USPAT; USOCR	OR	ON	2005/12/16 14:45

## EAST Search History

S20 4	1	"4982274".PN.	USPAT; USOCR	OR	ON	2005/12/16 14:46
S20 5	1	"5780928".PN.	USPAT; USOCR	OR	ON	2005/12/16 14:46
S20 6	1	"5699227".PN.	USPAT; USOCR	OR	ON	2005/12/16 14:46
S20 7	1	"5367765".PN.	USPAT; USOCR	OR	ON	2005/12/16 14:47
S20 8	1	"5291064".PN.	USPAT; USOCR	OR	ON	2005/12/16 14:47
S20 9	1	"4620216".PN.	USPAT; USOCR	OR	ON	2005/12/16 14:47
S21 0	2	"20050046020"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 06:25
S21 1	813	@ad<="20040120" and (257/675). ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 07:03
S21 2	4286	@ad<="20040120" and (257/712-714).ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 07:38
S21 3	2936	@ad<="20040120" and (257/715-718).ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 06:26
S21 4	747	@ad<="20040120" and (257/728). ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 06:26
S21 5	4	((("6670699") or ("4079410")).PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/01/30 06:27
S21 7	20	@ad<="20040120" and 'heat pipe' same 'coolant' same 'lead'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 07:04
S21 8	98	@ad<="20040120" and ('heat pipe' or 'heat sink') same 'coolant' same 'lead'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 07:41

## EAST Search History

S21 9	1	"6388317".PN.	USPAT; USOCR	OR	ON	2006/01/30 07:16
S22 0	1	"6323549".PN.	USPAT; USOCR	OR	ON	2006/01/30 07:16
S22 1	1	"6257320".PN.	USPAT; USOCR	OR	ON	2006/01/30 07:19
S22 2	1	"6219243".PN.	USPAT; USOCR	OR	ON	2006/01/30 07:19
S22 3	725	@ad<="20040120" and (257/720). ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 07:38
S22 4	240	@ad<="20040120" and (257/721). ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 07:38
S22 5	976	@ad<="20040120" and (257/722). ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 07:38
S22 6	1294	@ad<="20040120" and (257/714). ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 09:27
S22 8	115	@ad<="20040120" and ('heat pipe') with cool\$3 same 'die'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 08:03
S22 9	1165	@ad<="20040120" and (257/E23. 088).ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 08:03
S23 0	31	@ad<="20040120" and 'heat pipe' with 'lead' and cool\$3 and ('IC' or 'die' or 'chip')	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 10:23
S23 1	90	@ad<="20040120" and 'heat pipe' with ('lead' or wir\$3) and cool\$3 and ('IC' or 'die' or 'chip')	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 06:30
S23 2	1	"5671804".PN.	USPAT; USOCR	OR	ON	2006/01/30 08:25
S23 3	1	"5642776".PN.	USPAT; USOCR	OR	ON	2006/01/30 08:25

## EAST Search History

S23 4	1	"5427174".PN.	USPAT; USOCR	OR	ON	2006/01/30 08:26
S23 5	1	"5346000".PN.	USPAT; USOCR	OR	ON	2006/01/30 08:26
S23 6	1	"5179500".PN.	USPAT; USOCR	OR	ON	2006/01/30 08:26
S23 8	16	@ad<="20040120" and 'liquid cooling plate' and ('IC' or 'die' or 'chip')	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 08:43
S24 0	113	@ad<="20040120" and 'liquid' with cool\$3 with ('lead' or 'terminal') same ('IC' or 'die' or 'chip')	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 09:07
S24 1	12	@ad<="20040120" and 'liquid' with cool\$3 with ('lead' or 'terminal') same ('IC' or 'die' or 'chip') and encapsul\$4	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 08:44
S24 2	1	"5287001".PN.	USPAT; USOCR	OR	ON	2006/01/30 08:46
S24 3	1	"5216278".PN.	USPAT; USOCR	OR	ON	2006/01/30 08:47
S24 4	1	"5453641".PN.	USPAT; USOCR	OR	ON	2006/01/30 08:55
S24 5	142	@ad<="20040120" and ('liquid' with cool\$3 or 'heat pipe') with ('lead' or 'terminal') same ('IC' or 'die' or 'chip')	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 09:08
S24 6	0	@ad<="20040120" and 'heat pipe' with 'external terminal' same ('IC' or 'die' or 'chip')	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 09:09
S24 7	273	@ad<="20040120" and 'heat pipe' with ('external terminal' or 'lead')	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 09:09
S24 8	51	@ad<="20040120" and 'heat pipe' with ('external terminal' or 'lead') and ('die' or 'chip' or 'IC')	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 13:56
S24 9	1	"5671804".PN.	USPAT; USOCR	OR	ON	2006/01/30 09:15
S25 0	1	"5642776".PN.	USPAT; USOCR	OR	ON	2006/01/30 09:15



## EAST Search History

S25 1	1	"5427174".PN.	USPAT; USOCR	OR	ON	2006/01/30 09:15
S25 2	1	"5346000".PN.	USPAT; USOCR	OR	ON	2006/01/30 09:15
S25 3	1	"5436501".PN.	USPAT; USOCR	OR	ON	2006/01/30 09:20
S25 4	1	"5349237".PN.	USPAT; USOCR	OR	ON	2006/01/30 09:21
S25 5	1	"5206791".PN.	USPAT; USOCR	OR	ON	2006/01/30 09:21
S25 6	1	"5172213".PN.	USPAT; USOCR	OR	ON	2006/01/30 09:21
S25 7	1	"5172213".PN.	USPAT; USOCR	OR	ON	2006/01/30 09:24
S25 8	1	"5436501".PN.	USPAT; USOCR	OR	ON	2006/01/30 09:25
S25 9	1	"5349237".PN.	USPAT; USOCR	OR	ON	2006/01/30 09:25
S26 0	1	"5105259".PN.	USPAT; USOCR	OR	ON	2006/01/30 09:25
S26 1	1	"4912548".PN.	USPAT; USOCR	OR	ON	2006/01/30 09:26
S26 2	642	@ad<="20040120" and (257/715). ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 10:00
S26 3	528	@ad<="20040120" and (257/714). ccls. and coolant	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 09:28
S26 4	110	@ad<="20040120" and (257/714). ccls. and coolant and terminal	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 09:28
S26 5	197	@ad<="20040120" and (257/715). ccls. and 'coolant'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 10:00
S26 6	2	"20020185726"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 10:19
S26 7	237	@ad<="20040120" and 'terminal' same 'liquid' with cool\$3 and ('IC' or 'die' or 'chip')	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 10:25

## EAST Search History

S26 8	106	@ad<="20040120" and 'terminal' same 'liquid' with cool\$3 same ('IC' or 'die' or 'chip')	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 12:15
S26 9	8	@ad<="20040120" and 'terminal' same 'liquid cooling' same ('IC' or 'die' or 'chip')	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 10:26
S27 0	1	"5598034".PN.	USPAT; USOCR	OR	ON	2006/01/30 10:30
S27 1	1	"5491362".PN.	USPAT; USOCR	OR	ON	2006/01/30 10:31
S27 2	1	"5485037".PN.	USPAT; USOCR	OR	ON	2006/01/30 10:31
S27 3	2	("5869883").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/01/30 12:15
S27 4	197	@ad<="20040120" and 'heat pipe' same 'inner' with ('dielectric' or insulat\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 13:57
S27 5	123	@ad<="20040120" and 'heat pipe' with 'inner' with ('dielectric' or insulat\$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 14:02
S27 6	174	@ad<="20040120" and insulat\$4 with 'heat pipe' and 'semiconductor'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 14:07
S27 7	0	@ad<="20040120" and 'inner coated' with 'heat pipe' and 'semiconductor'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 14:07
S27 8	248	@ad<="20040120" and 'inner' with 'heat pipe' and 'semiconductor'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 14:08
S27 9	0	@ad<="20040120" and 'inner' with 'diel' with 'heat pipe' and 'semiconductor'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 14:08

## EAST Search History

S28 0	0	@ad<="20040120" and 'inner' with 'dielectric' with 'heat pipe' and 'semiconductor'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 14:08
S28 1	3	@ad<="20040120" and 'inner' with 'insulation' with 'heat pipe' and 'semiconductor'	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 14:12
S28 3	248	@ad<="20040120" and insul\$3 with 'heat' same cool\$3 and ('die' or 'IC' or 'chip')	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 14:16
S28 4	12	@ad<="20040120" and insul\$3 with 'heat' with 'pipe' same cool\$3 and ('die' or 'IC' or 'chip')	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/01/30 14:16
S28 5	2	"20050046020"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/13 11:12
S28 6	0	("2005/0046020").URPN.	USPAT	OR	ON	2006/07/26 17:15
S29 0	27	@ad<="20040120" and cool\$4 with "conductive pipe" same ("IC" or die or chip or power)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/26 17:22
S29 1	27	@ad<="20040120" and "conductive pipe" with cool\$5 same ("IC" or die or chip or power)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/26 17:20
S29 2	188	@ad<="20040120" and cool\$4 with (conductive with (pipe or tupe)) same ("IC" or die or chip or power)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 06:10
S29 3	4	((("6670699") or ("4079410"))).PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/07/27 05:55
S29 4	12	("4860165"   "5986885"   "6032355"   "6122171"   "6219243"   "6257320"   "6323549"   "6388317").PN. OR ("6670699").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/27 05:57

## EAST Search History

S29 5	355	@ad<="20040120" and cool\$4 with (conductive with (pipe or tube)) same ("IC" or die or chip or power)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 06:12
S29 6	1	@ad<="20040120" and refrigerant with (coolant or liquid) with (conductive with (pipe or tube)) same ("IC" or die or chip or power)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 06:13
S29 7	5	@ad<="20040120" and refrigerant with (coolant or liquid) same (conductive with (pipe or tube)) same ("IC" or die or chip or power)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 06:15
S29 9	100	@ad<="20040120" and refrigerant with (coolant or liquid) same "heat pipe" and ("IC" or die or chip or power)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 06:27
S30 0	4	((("6713851") or ("4951122")).PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/07/27 06:27
S30 1	1310	@ad<="20040120" and (257/714). ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 07:09
S30 2	2445	@ad<="20040120" and (361/704). ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 06:31
S30 3	396	@ad<="20040120" and (361/689). ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 06:31
S30 4	170	@ad<="20040120" and (361/698). ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 06:32
S30 5	862	@ad<="20040120" and (361/699). ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 06:32

## EAST Search History

S30 6	31	("20030133268"   "2942165"   "4012770"   "4106188"   "4381818"   "4995451"   "5150274"   "5210440"   "5262921"   "5349498"   "5448108"   "5455458"   "5606201"   "5780928"   "5880524"   "5966291"   "5986885"   "6016007"   "6037658"   "6055154"   "6141219"   "6397450"   "6400012"   "6414867"   "6424531"   "6473303"   "6535388"   "6594149"   "6892796"   "6937471").PN. OR ("6992887"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/07/27 06:42
S30 7	618	@ad<="20040120" and (257/714). ccls. and liquid with cool\$4	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/27 07:10